BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

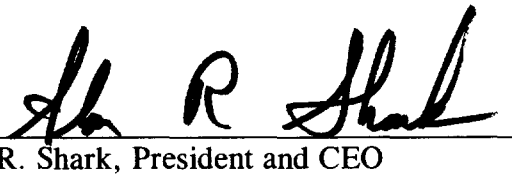
In the Matter of	)	
	)	
Relicensing of Certain Part 90 Frequencies	)	RM 9705
To Require Spectrally Efficient Use	)	

To: The Commission

REPLY COMMENTS OF THE
AMERICAN MOBILE TELECOMMUNICATIONS ASSOCIATION, INC.

Respectfully submitted,

AMERICAN MOBILE TELECOMMUNICATIONS ASSOCIATION, INC.

By: 

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SUMMAY

The comments made on the instant Petition for Rulemaking are clearly divided between those who are willing to gamble the future of the private land mobile ("PLMR") industry on the continuing efficacy of the existing licensing framework, and those like AMTA, who believe the industry needs and deserves greater certainty.

AMTA clarifies that, contrary to statements made in some comments, its proposal seeks specifically to balance the needs of private and commercial users of the 450-470 MHz band through creation of both shared and exclusive-use spectrum, all of which would be available, and some reserved, to purely private users. The proposal also seeks to continue the provision of service only to Part 90 eligibles, not the general public, and calls for relocation of, or new equipment to, existing users at the expense of geographic licensees.

Commercial specialized wireless providers have been serving the needs of the private wireless community since their inception thirty years ago, and can often do so more efficiently than these entities can on individually licensed systems, at a reasonable cost. The Petition seeks to continue these efficiencies. However, the Association agrees that not all private wireless needs can be met through commercial systems, and has long favored a variety of communications options for PLMR users. The proposal thus includes choices for entities who may or may not require exclusive use of frequencies.

Some comments note the FCC's obligation to avoid mutual exclusivity; however, the potential for mutual exclusivity is inherent in the channel exclusivity needed for future technologies. For a large proportion of the PLMR community, needed spectrum efficiency improvements and technical enhancements can be achieved only with exclusive channel assignments.

AMTA disagrees with those commenters alleging that the current regulatory framework works well today, and is even less hopeful that it will meet the needs of the industry's future. All commenters agree on the need for greater capacity for this industry. While AMTA remains hopeful that new and timely allocations will be made available, the Association submits that its Petition offers a preferred means of enhancing an existing allocation. It advances the proposal as preferable to a regulatory framework that protects less advanced incumbent facilities at the expense of future technological developments, while all users are increasingly subject to interference from overlay licensees.

The American Mobile Telecommunications Association, Inc. ("AMTA" or "Association"), in accordance with Section 1.405(b) of the Federal Communications Commission ("FCC" or "Commission") Rules and Regulations, respectfully submits its Reply to the comments filed in response to the above-entitled Petition for Rule Making.[1] The filings regarding AMTA's Petition reflect the sharp delineation between those who are prepared to stake the future of the Private Land Mobile Radio ("PLMR") industry on the allocation of as yet unidentified bands of clear spectrum and those, like AMTA, who believe the needs of current and prospective PLMR users demand and deserve a greater level of certainty. For the reasons described below, AMTA urges the Commission to proceed expeditiously toward the adoption of rules consistent with the regulatory framework proposed in the Petition.

I. CLARIFICATION OF AMTA PROPOSAL

1. It is evident from the comments that parties reviewed the Association's proposal through the prisms of their very personalized view of this industry and their role within it. Although understandable, the resultant pleadings in a number of instances are based on a distorted understanding of what the Petition actually proposed and, therefore, its implications for the PLMR community. Reasonable people can disagree about whether they believe a particular proposal would be good or bad, but they should make that determination based on fact, not fear.

2. A reiteration of the critical points of the proposal may be helpful. AMTA has recommended:

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[1] *Petition for Rule Making*, Relicensing of Certain Part 90 Frequencies To Require Spectrally Efficient Use, RM 9705, July 30, 1999 ("Petition").

- All **non-Public Safety** spectrum in the 450-470 MHz Part 90 band should be divided into a **2 MHz allocation for continued shared use** with the remaining approximately **10 MHz available for private or commercial geographic licenses** assigned by auction or other statutorily authorized means;

- **2.5 MHz of the 10 MHz** for geographic licenses would be **reserved for private, internal eligibles**;

- **Commercial licensees** would be **restricted to providing service to Part 90 eligibles**;

- All **geographic licensees** would be **required to implement more spectrally efficient technology**;
- **Incumbents would be relocated** to remaining shared spectrum or would be provided with more efficient equipment to operate on commercial geographic systems **at the expense of the geographic licensee**; and

- **Geographic licensees** would be **limited to one system per geographic area**.

3. Contrary to certain of the comments, the **proposal would not**:

- Restrict private internal licensees to 2 MHz of shared spectrum[2]; or

- Require incumbents to relocate without compensation.

II. DISCUSSION

4. There is no disagreement among members of the PLMR community that this industry segment needs more capacity. The question is how to accommodate a growing demand for communications capability from existing and prospective PLMR eligibles.

5. In general, those opposing the Petition argue that these needs should be met through a new allocation of clear spectrum to which users could migrate voluntarily. AMTA agrees. The Association is part of the Land Mobile Communications Council ("LMCC") and supports fully

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[2] *See,* Opposition of the Association of American Railroads at 4, n.9("AAR"); Comments of The Boeing Company at 2 ("Boeing"); Joint Opposition of the Industry Coalition at 2-3 ("Coalition").

the LMCC's efforts to secure new spectrum opportunities for Part 90 users.[3] Unencumbered spectrum is the best, easiest way to address the continued growth of PLMR requirements.

6. AMTA differs from its critics in this fundamental respect: the Association cannot assume that LMCC's effort will be successful on a timely basis, and thus is unwilling to rely on it as the only meaningful source for additional PLMR capacity. Unlike some commenters, AMTA sees no evidence that the refarming initiative, however laudable, will produce spectrum efficiencies of the degree needed to satisfy PLMR expansion needs.[4] The Association has proposed what it recognizes as a "revolutionary" solution for these spectrum deficiencies in anticipation of the possibility that the PLMR community will be required to derive significantly improved spectral efficiencies from its existing allocations or deny all users, current and prospective, an acceptable level of service quality.

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[3] *See, Petition for Rule Making*, An Allocation of Spectrum for the Private Mobile Radio Services, RM - 9267, LMCC, April 22, 1998.

[4] AMTA explained in its Petition its reservations about the amount of capacity refarming will create in the very urban areas in which spectrum is most scarce. Report and Order, PR Docket No. 92-235, 10 FCC Rcd 10,076, ¶28 (1995). While some commenters argue it is premature to evaluate the impact refarming might have on increased spectrum efficiencies, although the proceeding is almost a decade old (*see*, Coalition at 6; Opposition of Blooston, Mordkofsky, Jackson & Dickens at 7 ("Blooston")), other parties concur with AMTA that the purely voluntary nature of that approach is not capable of driving the level of efficiency improvements needed. *See,* Opposition of Mobex Communications, Inc. at 9-10; Statement in Support of Champion Communications at 2-3; Comments of ComSpace Corporation at 4-5; Comments of Fisher Wireless Services, Inc. at 3; Comments of Qualicom, Inc. at 4.

A. Commercial Part 90 Licensees Traditionally Have Served the Needs of the PLMR User Base.

7. One common objection expressed by those opposing AMTA's proposal was the claim that commercial licensees cannot or do not serve the needs of the PLMR user community, or that these systems "use fundamentally different architecture and interference criteria than private wireless systems."[5] They describe a usurpation of "private" spectrum for "commercial" use as though commercial systems serve some alien form of customer, customers entirely unrelated to traditional Part 90 users. Frankly, the Association is at a loss to understand the basis for those assertions.

8. The fact is that a significant number of Part 90 eligibles have received service from a third party provider or licensee since the 1960s, an option that has benefitted both those who utilized it and those who elected to operate their own systems. Initially, users too small or without sufficient interest to invest in their own systems were attracted to multiple-licensed community repeaters. Subsequently those systems were converted to private carriers in the bands below 800 MHz. In both cases, this aggregation of usage on a common frequency and a common system conserved spectrum resources and freed up capacity for those whose needs demanded a more customized system.

9. The same types of Part 90 eligibles who had operated on these shared systems, and in many cases the very same entities, abandoned that single frequency, technically primitive, party-line conventional option when they were able to migrate to technically superior, more efficient, trunked Specialized Mobile Radio ("SMR") systems in the 800 MHz and 900 MHz

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[5] Comments of APCO at 2.

frequency bands, and similar systems on the 220-222 MHz band. Users voluntarily purchased new, more costly equipment when offered the superior grade of service and privacy trunking offered, even at a somewhat higher monthly service charge. Indeed, in the years between 1992 and 1997, and even as there began a conversion of SMR spectrum from traditional analog to Nextel's digital iDEN technology, the number of analog, non-iDEN SMR subscriber units grew from approximately 1.3 to 1.7 million, more than eighty percent (80%) of which had dispatch capability only.[6]

10. These customers use the facilities of commercial providers for communications between and among employees. This usage is just as "private", just as "internal" as are the transmissions of PLMR users with systems they own and/or maintain themselves. There simply is no factual or legal basis for the claim that AMTA is proposing to "set aside for its members" spectrum that rightfully should be used to serve private user requirements.[7] Indeed, the more valid assertion is that these systems serve a greater volume of private internal communications than do individual systems with comparable amounts of spectrum. The SMR service was created for the express purpose of implementing more costly, more efficient trunked facilities that could handle a higher per-channel traffic load than conventional systems, to accommodate an otherwise unsustainable growth in private communications requirements, and it accomplished precisely that. Had the FCC not fostered the use of third party systems to meet private user needs, the PLMR community would have depleted its available spectrum supply years, perhaps decades, ago.

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[6] *See, The State of SMR and Digital Mobile Radio: 1998*, AMTA/The Strategis Group, 1998, at 136 ("1998 Study").

[7] *See,* Coalition at 5.

11. The Commission's approach worked because, for the most part, the plumbers, electricians, service personnel, delivery companies, construction workers, and security companies that qualify to operate on Part 90 spectrum do not have "customized, specialized" communications requirements.[8] They typically want service throughout the market area in which their businesses are based with an acceptable level of service quality and at a reasonable cost.[9] That is precisely the service that community repeater, then private carrier, and finally SMR operators have provided for decades. AMTA is unaware of any evidence, and none has been offered in this proceeding, that this type of Part 90 user needs or even thinks he wants the cost and responsibility of implementing his own communications system.

12. This is not to say that all PLMR entities would be well served by a commercial system. AMTA consistently has taken the position that the diversity of this community demands a variety of communications options. Many users find that third party systems are optimal for their needs. Others do have more specialized requirements and spectrum should be available for their use.[10] That balance has been a hallmark of the PLMR services for many years and is

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[8] *Cf., e.g.,* Blooston at 6.

[9] Interestingly, the average monthly SMR revenue per subscriber remained almost constant during the 1992-1997 period with average dispatch revenue reported to be approximately $16.00 per unit per month. 1998 Study at 136. Contrary to the allegations in certain comments that Part 90 users cannot afford the cost of commercial service, analog, trunked SMR service still must be considered one of the great communications bargains of the century. *Cf,* Blooston at 15: "AMTA...naively believes that the traditional private radio users will be able to receive such service from commercial providers at a reasonable cost."

[10] AAR strongly opposes the Petition on the basis that it would leave the railroad industry with what it describes as a Hobson's choice: relocate to frequencies shared with the "entire population of users of the Industrial/Business pool" or subscribe to a commercial service. AAR at 4. That assessment is factually incorrect in two critical respects. First, as explained in the Petition and again, *supra*, private internal licensees are eligible for all 10 MHz assigned for

precisely the regulatory scheme proposed in the Petition. Parties may have differences of opinion regarding the appropriate allocation of spectrum between private, internal and commercial systems serving Part 90 users, but there is no credible argument that the community repeater, the private carrier and the conventional and trunked SMR system serve some constituency other than traditional PLMR eligibles.

B. The Petition Recognizes the Needs of All PLMR Eligibles.

13. Most parties opposing the Petition allege that it would require all existing Part 90 licensees in the 450 MHz band to consolidate their operations onto 2 MHz of shared spectrum, leaving the remaining 10 MHz for commercial service only.[11] That characterization is inaccurate. AMTA has proposed that the 450 MHz band be revised to distinguish between licensees on shared spectrum and those assigned exclusive channels within a defined geographic area. With one exception, the composition of licensees on those channel groupings will be determined by the marketplace preferences of potential users, not regulatory fiat. Indeed, to ensure further that non-commercial licensees retain a choice between shared and exclusive spectrum, the Association has recommended reserving 2.5 MHz of the 10 MHz of geographic licenses for private, internal licensees.[12]

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geographic licenses, of which 2.5 MHz is reserved specifically for their use. Second, the railroad community seemingly has forgotten that it has at its disposal 6 channel pairs of 900 MHz spectrum allocated with near nationwide exclusivity for railroad operations. *See Order*, FCC 88-8, 3 FCC Rcd 427 (1998). Nearly 12 years after allocation the degree to which the railroad industry is using the assigned channels is unclear.

[11] *See* n.2, *supra.*

[12] No particular spectrum reservation is necessary on the shared spectrum since, by definition, all applicants will be assigned some channel. That is both the benefit and drawback of shared spectrum: no one is turned away, but no one is entitled to any particular grade of

14. The real issue, therefore, is the use of a geographic, rather than site-specific, licensing approach and the auction implications related thereto. In the Association's opinion, geographic licenses are the only viable means of avoiding potentially endless daisy chains of mutual exclusivity when licenses becomes available pursuant to a new regulatory scheme.[13] Moreover, there is operational flexibility inherent in a geographic licensing approach that should be useful for commercial and non-commercial licensees alike. AMTA is confident that, as they have been in other spectrum bands, properly configured market areas could be established to reflect reasonably the requirements of the vast majority of 450 MHz licensees.

15. The insistence on the part of certain commenters that all 10 MHz of geographic licenses would be assigned to commercial licensees seemingly rests on the assumptions that non-commercial entities should not be required to pay for spectrum and, in any event, that they would not be successful in acquiring spectrum in an auction with commercial competitors. The first assumption has been disallowed already by Congress.[14] While it remains to be seen which PLMR entities qualify as "public safety" under the legislative definition in the amendments to the Balanced Budget Act, it is clear that Congress does not endorse a statutory exemption from auction participation for other PLMR eligibles. AMTA indicated in the Petition that the 2.5 MHz

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service.

[13] In fact, the FCC first used market, rather than site, definitions in a Part 90 service more than a decade ago when it created the 900 MHz SMR Designated Filing Area ("DFA"). *See Third Report and Order*, GN Docket No. 93-252, 9 FCC Rcd 7988 (1994). DFAs were designed to prevent overlapping problems of mutual exclusivity whereby a license in Maine could theoretically affect an applicant in Miami. The concept worked effectively in that instance and has been refined by the FCC in numerous licensing schemes since then.

[14] Pub. L. No. 105-33, Title III, Stat. 251 (1997) ("Balanced Budget Act").

of private internal spectrum might be awarded by means other than competitive bidding if the FCC was statutorily empowered to do so, and that position has not changed. In the meantime, however, the Association's proposal must be limited to options for which the Commission has legal authority.[15]

16. Moreover, even if all geographic licenses are granted by auction, and even if a private internal applicant is not successful in securing frequencies from the 2.5 MHz reserve, there is no evidence that PLMR users would be deprived of needed spectrum. As an initial matter, the very entities that are most likely to require customized systems not necessarily offered by commercial providers often are in a superior financial position to acquire whatever spectrum they need. For example, it is difficult to conceive of an auction in which The Boeing Company, one of the largest and most financially substantial companies in the nation, could not be successful if it determined that radio capability was truly as significant to its business as the aluminum and other resources it must acquire in the marketplace. The needs of smaller users tend either to be ones that could continue to be satisfied on shared spectrum or that are best accommodated by a commercial provider, as evidenced by the voluntary migration of such entities to trunked 800 MHz and 900 MHz SMR systems. Under AMTA's proposal, the cost of changing their equipment to a different shared frequency or the cost of equipment to operate on a commercial system would be borne by the geographic licensee. Alternatively, if the FCC implements its band manager concept,[16] users could aggregate their needs, perhaps even under the umbrella of a

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[15] *Cf.*, Boeing at 2.

[16] *Notice of Proposed Rulemaking*, WT Docket No. 99-87, 14 FCC Rcd ____, ¶¶88-95 (1999) ("NPRM").

frequency advisory committee, and secure necessary spectrum on a collective basis. The critical factor is that spectrum would be awarded in blocks of sufficient channel size and geographic scope to support an investment in more spectrally efficient and technically advanced equipment.

C. The PLMR Industry Needs the Spectrum Efficiency Improvements and Technical Enhancements that Can be Achieved Only on Exclusive Channel Assignments.

17. The key issue in this proceeding is not whether PLMR requirements are satisfied on private internal versus commercial systems, but how this industry can implement the efficiency and technical improvement that will be needed to fuel its future growth. Some commenters insist the current regulatory scheme is working well; that continued, presumably limitless shared use of spectrum is all Part 90 users need or want, and assert that the frequency coordination process will ensure that current and future spectrum requirements are satisfied without the possibility of mutual exclusivity.[17] They oppose the Petition on the basis that it artificially creates situations of mutual exclusivity, with the attendant specter of spectrum auctions.

18. AMTA disagrees with the proposition that the existing regulatory framework for this band works effectively today. It is even less sanguine about its ability to function for the benefit of users into the next century. In the Association's opinion, necessary spectrum efficiencies and appropriate technical enhancements will be implemented in the 450-470 MHz band only if there are meaningful opportunities to secure exclusive channel blocks – an opportunity not available today in sufficient spectrum quantities in critical urban areas. The need

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[17] *See,* Blooston at 6; Boeing at 2; Coalition at 8-9.

for channel exclusivity, and for a date certain by which improved efficiencies will be implemented, are the motivating forces behind the Petition.

19. AMTA believes there is broad agreement within the industry that capacity will be needed to satisfy future private spectrum requirements. Contrary to the claims in certain Comments on the Petition, an interest in technology enhancements is not, and should not be, limited to operators of large, consumer-oriented, "commercial" systems such as cellular, PCS and ESMR. In fact, several parties participating in this proceeding specifically noted this fact in their Comments on the FCC's proposals to implement the Balanced Budget Act amendments.[18] For example, the Joint Comments filed by ITA, CICS, TLCC and TELFAC stated:

> ...migration to narrowband technologies [in the refarmed bands] will only provide a "stop gap" measure as the demand for private wireless spectrum is simply too great....As new technological advances have emerged, the demand for private wireless frequencies has increased and there is no evidence that this trend will not continue.[19]

Similarly, in that same proceeding, Motorola concluded:

> The FCC should understand very clearly, however, that even assuming an ideal migration to very narrowband technologies in the 150 MHz, 450 MHz and 800 MHz bands, the non-public safety, private land mobile services need new spectrum allocations to meet growing demand for new, bandwidth intensive technologies....The lack of spectrum "green space" into which newer technologies employing wider bandwidths can be deployed will frustrate the development of advanced private wireless systems contrary to the FCC's spectrum management obligations contained in Section 309(j)(3) of the Communications Act.[20]

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[18] *See* NPRM.

[19] Joint Comments on NPRM at 18.

[20] Motorola Comments on NPRM at 10.

20. To the extent there is disagreement among the parties to this proceeding, it appears focused on **how**, not **whether**, additional capacity will be needed for technically advanced PLMR systems, both private internal and commercial facilities, and under what regulatory structure it will be assigned and operated. Those opposing the Petition must be confident that additional allocations are in the offing, since they acknowledge that greater capacity is essential. AMTA remains hopeful that new, and as important, timely, allocations will be made available. But the Association believes it imperative simultaneously to ensure more efficient use of existing bands.

21. Further, AMTA is convinced that the advanced systems referenced by both parties above implicitly contemplate a level of channel exclusivity that is not achievable under the current or contemplated rules governing these bands. The Association is not aware of any advanced technologies available today or under development that are designed to work in the shared, party-line channel environment that has characterized the PLMR bands below 470 MHz. Channel exclusivity, and therefore the potential for mutual exclusivity, is inherent in introducing the technological enhancements needed to produce adequate channel capacity even if licenses continue to be granted on a site-specific basis. Since the regulatory paradigm must reflect this change in any event, AMTA has recommended adoption of a geographic licensing structure to avoid what otherwise could be endless chains of mutual exclusivity and to provide a degree of operational flexibility that is advantageous to all categories of PLMR licensees.

22. For all these reasons, AMTA agrees with those parties who have argued that an overlay approach to higher efficiencies in these bands is not appropriate. As refarming is proving, attempting to overlay more advanced, efficient technologies on decades-old equipment produces the worst of all worlds: the potential efficiencies of improved systems are severely comprised by

a need to work around less advanced incumbent facilities and the operations of admittedly less efficient incumbents are increasingly subject to interference from overlay licensees. It is a compromise that serves no public interest and should be abandoned in favor of the regulatory framework outlined in the Petition.

III. CONCLUSION

23. For the reasons described above, AMTA urges the Commission to adopt rules that create geographic licensing opportunities on the frequencies in question and that also provide for the migration of existing licensees either to a portion of this band that would be retained for shared use or to the more technically advanced systems implemented by geographic licensees.

CERTIFICATE OF SERVICE

I, Linda J. Evans, a secretary in the law office of Lukas, Nace, Gutierrez & Sachs, hereby certify that I have, on this October 8, 1999 caused to be mailed, first-class, postage prepaid a copy of the foregoing Reply Comments to the following:

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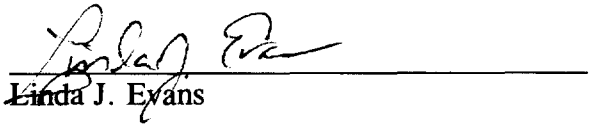

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